

ABSTRACT

In an optical packet switch, NW wavelengths, over which inputted optical packets may be switched, are grouped into KG groups of wavelengths, where NW and KG are integers greater than one. The KG groups of wavelengths are characterized in that each of the KG groups of wavelengths is allocated to optical packets distinguished from other optical packets by at least one attribute of at least one packet characteristic. Each one inputted optical packet is switched over a wavelength having an available transmission resource selected from among wavelengths in one of the KG groups of wavelengths that is matched to the one inputted optical packet by correspondence of attributes of the at least one packet characteristic. Related apparatus and methods are also described.